

FACT SHEET
FOR PROPOSED PERMITTING ACTION
UNDER 9 VAC 5 Chapter 80 Article 1 (TITLE V-CLEAN AIR ACT)

VA-30718 AIRS ID 51-0143-0100
Owens-Brockway Glass Container Inc.
29 Glass Blower Lane
Ringgold, VA 24586

29 Glass Blower Lane, Ringgold
UTM Coordinates are ZONE: 17 EASTING: 637.9 km NORTHING: 4045.3 km

Owens-Brockway Glass Container Inc. is a manufacturer of container glass covered by Standard Industrial Classification (SIC) Code 3221. The glass manufacturing process begins with receiving and mixing of raw materials (including recycled glass, sand, salt cake, limestone, and soda ash). Individual components are weighed, mixed, and fed ("charged") to the glass furnace in batches. However, batches are charged so that there is a continuous flow of glass and resultant "steady state" operation of the furnace. Molten glass passes through a refiner which heat conditions the glass, then across a forehearth and into the forming process. Glass containers are shaped by lubricated molds. The interior of the containers is etched with a tin tetrachloride vapor, cooled, and then coated with a dilute polyethylene emulsion. Finally, a code is printed onto the exterior of the container.

Owens-Brockway is a Title V major source of SO₂, NO_x, and PM. The source is located in an attainment area for all pollutants. The facility has the potential to operate twenty-four (24) hours per day, seven (7) days per week, fifty-two (52) weeks per year.

The source was last inspected on February 29, 2000. Compliance status was found to be unknown, and a compliance determination continues to be pending. The required annual emission statement and certification were submitted by Owens-Brockway on February 29, 2000.

EMISSIONS SUMMARY:

PLANTWIDE EMISSIONS SUMMARY [TONS PER YEAR]		
CRITERIA POLLUTANTS	POTENTIAL EMISSIONS*	1999 ACTUAL EMISSIONS
Particulate Matter (PM10)	101	59.1
Nitrogen Oxides (NO _x)	464	493.1
Sulfur Dioxide (SO ₂)	272	267.9

***Potential emissions include limitations from permit issued 4/6/01; this reflects a reduction from previous emission levels.**

TITLE V PROGRAM APPLICABILITY BASIS:

This facility has the potential to emit more than 100 tons per year of NO_x, SO₂, and PM. Due to this facility's potential to emit over 100 tons per year of a criteria pollutant, Owens-Brockway Glass Container Inc. is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 9 VAC 5 Chapter 80 Article 1.

APPLICABLE REGULATIONS/EXISTING PERMITS

There are two federal regulations which apply to glass manufacturing operations. 40 CFR 61, Subpart N (National Emission Standard for Inorganic Arsenic Emissions from Glass Manufacturing Plants) applies to each glass melting furnace that uses commercial arsenic as a raw material. Because Owens-Brockway uses no commercial arsenic in their manufacturing process, their furnace is not affected by this Subpart. The permit shield includes Subpart N as a requirement which has been explicitly deemed to be not applicable to this facility.

40 CFR 60, Subpart CC (Standards of Performance for Glass Manufacturing Plants) applies to each glass melting furnace that commences construction or modification after June 15, 1979. Owens-Brockway's furnace was built prior to the applicability date but modifications to the furnace have triggered Subpart CC. The furnace meets the 40 CFR 60.291 definition of a unit "with modified processes", and is subject to a particulate matter emission limit of 0.5 g/kg (1.0 lb/ton) in accordance with 40 CFR 60.293. However, this standard is less stringent than the particulate emission limit of 0.71 lb/ton imposed as state BACT in the 4/6/01 permit. The more restrictive particulate emission limit in Condition IV.A.5 ensures compliance with both the streamlined NSPS limit and the underlying minor NSR permit limit.

There have been two permits issued for the facility. The first, dated August 26, 1977, was for construction of two glass furnaces; however, only one furnace was built within the allowed construction period. The 1977 permit was superseded by a permit dated 4/6/01, which incorporates several modifications made to the facility. The 4/6/01 permit is the only currently valid permit for the plant.

All storage tanks were reviewed for applicability of Section 112 (r) of the 1990 CAAA (accidental release of HAPs). Only one tank contains a pollutant (ammonia) which is subject to 112 (r), and that tank has a capacity below the threshold for the regulated pollutant. Accordingly, no units have been found to be subject to the provisions of 112 (r).

Periodic Monitoring

Boilers

Periodic monitoring requirements for opacity from the boilers are based on observation of the presence or absence of visible emissions. Since the only approved fuels are gas and distillate oil, no visible emissions are expected. However, in the event visible emissions are observed, corrective action is required. If corrective actions do not result in the absence of visible emissions, VEE's as determined by EPA Method 9 (reference 40 CFR 60, Appendix A) are required to demonstrate compliance with the applicable opacity limit.

Melt Furnace

In accordance with NSPS Subpart CC, periodic monitoring requirements for opacity from the melt furnace are based on continuous opacity monitoring. A stack test for particulate emissions is to be run concurrently with the performance evaluation for the COMS. During the test, the opacity value corresponding to the 99% upper confidence level of a normal distribution of average opacity values is established. The opacity limit is the lower of this value or 20% opacity as allowed under state regulation. As required by Subpart CC, 6-minute periods when opacity exceeds the 99% UCL are to be reported as excess emissions.

Allowable SO₂ emissions were established based on a mass balance, and previous source-specific emission testing indicates that the unit is capable of operating within the allowable limit. Compliance testing for SO₂ will be conducted to substantiate the mass balance calculations; this testing will provide a demonstration that the furnace is operating in compliance with the applicable emission standard and that the mass balance calculation can be used as a demonstration of continuing compliance.

Allowable NO_x emissions were established based on an AP-42 emission factor. Compliance testing for NO_x will be conducted to substantiate the validity of the emission factor (lb/ton of glass). This is considered sufficient to demonstrate continuing compliance with the NO_x emission limit, since throughput x anticipated emission factor = emission limit (see Attachment A).

Performance testing for PM, SO₂ and NO_x will be repeated once each permit term, at a frequency not to exceed five years.

LEGAL AND FACTUAL BASIS FOR DRAFT PERMIT CONDITIONS:

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the Commonwealth of Virginia Federal Operating Permit Regulations for the purposes of Title V of the Federal Clean Air Act (9 VAC 5 Chapter 80 Article 1), and underlying applicable requirements in other state and federal rules. Applicable requirement means all of the following as they apply to emission units in a Title V source:

- a. Any standard or other requirement provided for in the State Implementation Plan or the Federal Implementation Plan, including any source-specific provisions such as consent agreements or orders.
- b. Any term or condition of any preconstruction permit issued pursuant to 9 VAC 5-80-10, Article 8 (9 VAC 5-80-1700 et seq.) of this part or 9 VAC 5-80-30 or of any operating permit issued pursuant to 9 VAC 5 Chapter 80 Article 5, except for terms or conditions derived from applicable state requirements or from any requirement of these regulations not included in the definition of applicable requirement.
- c. Any standard or other requirement prescribed under these regulations, particularly the provisions of 9 VAC 5 Chapter 40 (9 VAC 5-40-10 et seq.), 9 VAC 5 Chapter 50 (9 VAC 5-50-10 et seq.) or 9 VAC 5 Chapter 60 (9 VAC 5-60-10 et seq.), adopted pursuant to requirements of the federal Clean Air Act or under § 111, 112 or 129 of the federal Clean Air Act.
- d. Any requirement concerning accident prevention under § 112(r)(7) of the federal Clean Air Act.
- e. Any compliance monitoring requirements established pursuant to either § 504(b) or § 114(a)(3) of the federal Clean Air Act or these regulations.
- f. Any standard or other requirement for consumer and commercial products under § 183(e) of the federal Clean Air Act.
- g. Any standard or other requirement for tank vessels under § 183(f) of the federal Clean Air Act.
- h. Any standard or other requirement in 40 CFR Part 55 to control air pollution from outer continental shelf sources.
- i. Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the federal Clean Air Act, unless the administrator has determined that such requirements need not be contained in a permit issued under this article.

- j. With regard to temporary sources subject to 9 VAC 5-80-130, (i) any ambient air quality standard, except applicable state requirements, and (ii) requirements regarding increments or visibility as provided in Article 8 (9 VAC 5-80-1700 et seq.) of this part.
- k. Any standard or other requirement of the acid deposition control program under Title IV of the Clean Air Act or the regulations promulgated thereunder.
- l. Any standard or other requirement governing solid waste incineration under § 129 of the Clean Air Act.

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 9 VAC 5 Chapter 80 Article 1 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the state but is not federally-enforceable is identified in the draft Title V permit as such.

REQUEST FOR VARIANCES OR ALTERNATIVES:

None

COMMENT PERIOD:

The public notice appeared in the ***** on [date].

Beginning Date: ****

Ending Date: *****

All written comments should be addressed to the following individual and office:

Department of Environmental Quality
South Central Regional Office
7705 Timberlake Road
Lynchburg, VA 24502
Phone: (804) 582-5120 Fax: (804) 582-5125

PROCEDURE FOR REQUESTING PUBLIC HEARING:

During the public comment period any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for a public hearing shall be in writing to the above address and shall state the nature of the issues proposed to be raised in the hearing. The Director shall grant such a request for a hearing if he concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.